## CLAIMS

[Claim 1]

A phosphorylcholine group-containing

5 chemical compound represented by the following formula (1).

(1)

 $\label{eq:continuity} In this formula, m denotes 2-6 and n denotes \\ 10 \quad 1-4.$ 

 $X_1$ ,  $X_2$ , and  $X_3$ , independent of each other, denote a methoxy group, ethoxy group, or halogen. Up to two of  $X_1$ ,  $X_2$ , and  $X_3$  can be any of the following groups: a methyl group, ethyl group, propyl group, isopropyl group, butyl group, or

(1) in the structures of the following formulas

20 (2)-(4) is expressed as 
$$A-R-B$$
).

(2)

15

$$A \longrightarrow \begin{pmatrix} H \\ N \end{pmatrix}_{p} B$$

(4)

5 In formulas (2)-(4), L is 1-6, and P is 1-3. [Claim 2]

A phosphorylcholine group-containing chemical compound represented by the following formula (5) or (6).

$$X_{2}$$
  $S_{i}$   $C_{i}$   $C_{i$ 

(5)

10

$$X_2$$
 Si -  $(CH_2)_m$  -  $N$  O  $CH_2)_n$  -  $N$  +  $CH_2)_n$  -  $N$  -

(6)

In this formula, m denotes 2-6 and n denotes 1-4.  $X_1$ ,  $X_2$ , and  $X_3$ , independent of each other, denote a methoxy group, ethoxy group, or halogen. Up to two of  $X_1$ ,  $X_2$ , and  $X_3$  can be any of the following groups: a methyl group, ethyl group,

propyl group, isopropyl group, butyl group, or isobutyl group.

[Claim 3]

A surface modifier consisting of the phosphorylcholine group-containing chemical compound of claim 1 or 2.

[Claim 4]

represented by said formula (6) in which a

10 compound having a phosphorylcholine group and a carboxyl group is synthesized by means of an oxidation reaction of glycerophosphorylcholine using sodium periodate and ruthenium trichloride and synthesis is carried out by using a

15 condensation agent on an organic silane compound having an amino group and the compound having a phosphorylcholine group and a carboxyl group.

[Claim 5]

A method of manufacturing the compound

Modified powder treated with the surface 20 modifier of claim 3.

[Claim 6]

A chromatography packing consisting of a modified carrier treated with the surface modifier of claim 3.

25 [Claim 7]

A modified filter treated with the surface modifier of claim 3.

## [Claim 8]

A glass experimental device whose surface is treated with the surface modifier of claim 3.